



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,318	03/17/2005	Mirko Appel	2002P15665WOUS	4524
7590 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830				
			EXAMINER FAYYAZ, NASHIMIYA SAQIB	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 04/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,318

Applicant(s)

APPEL ET AL.

Examiner

Nashmiya S. Fayyaz

Art Unit

2856

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/CD/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 13- are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley et al-US Patent # 1,788,941. As to claim 13, Bradley et al disclose a device and associated method for indicating undue wear in rotating machinery including assigning an acoustical signal (mechanical alarm) to a specific failure (wear) of a rotatable component (bearing 18) and mounting a vibratory device (vibratory arm 32a) on the component (bearing 18) via shaft 74, wherein the arm 32a mechanically

Art Unit: 2856

vibrates hammer 96 of bell 98 or bell 100, see pages 2 and 3 and figs. 1, 2, 5 and 9. It is noted that Bradley et al. fails to indicate that the machinery is in a technical installation. Although this recitation is considered to be intended usage, rotating machinery is known to be extensively used in technical installations and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the Bradley et al device to monitor wear of bearings of rotating machinery in industrial applications. As to claim 14, note plate (vibration arm 32a) capable of vibrating at the frequency suggesting wear. As to claims 15 and 16, usage of multiple devices for monitoring multiple rotating components is considered to have been a clear matter of design choice in the event of multiple rotating components being employed so as to monitor each component for wear where each device would be specific to the component. As to claim 17, Bradley et al disclose an apparatus for indicating undue wear in rotating machinery including assigning an acoustical signal (mechanical alarm) to a specific failure (wear) of a rotatable component (bearing 18) and mounting a vibratory device (vibratory arm 32a) on the component (bearing 18) via shaft 74, wherein the arm 32a mechanically vibrates hammer 96 of bell 98 or bell 100, see pages 2 and 3 and figs. 1, 2, 5 and 9. It is noted that Bradley et al. fails to indicate that the machinery is in a power plant. Although this recitation is

considered to be intended usage, rotating machinery is known to be extensively used in power plants and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the Bradley et al device to monitor wear of bearings of rotating machinery in power plants. As to claim 18, note plate (vibration arm 32a) capable of vibrating at the frequency suggesting wear. As to claims 19 and 20, usage of multiple devices for monitoring multiple rotating components is considered to have been a clear matter of design choice in the event of multiple rotating components being employed so as to monitor each component for wear where each device would be specific to the component.

Response to Arguments

4. Applicant's arguments with respect to claims 13-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art cited on PT0-892 include other wear detectors where the vibrating element generates the acoustic signal.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

Art Unit: 2856

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

/N. S. F./

Examiner, Art Unit 2856

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856